

REMARKS

Applicant respectfully requests reconsideration of the instant application on the basis of the newly amended Claims. Claims 1 and 8 are the main claims and the remaining claims are directly or indirectly dependent upon those.

The Examiner has rejected the claims as being unpatentable over U.S. Patent No. 5,329,470 by Sample (*Sample*) in view of U.S. Patent No. RE37,885 E by Acres (*Acres*). It is believed that Claims 1 to 12 are clearly distinguishable over these 2 references for the reasons that will be set forth.

Claim Rejections under 35 U.S.C. § 112

The Examiner rejected claims 1-2 and 4-12 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Presently, Applicant has amended the preamble to independent claim 8 to use the same phrase used in the preamble to independent claim 1. In addition, Applicant respectfully draws the Examiner's attention to the major indentations used in the two independent claims, which has been present since the initial filing. Each of the major limitation elements appear in their own individual major indented sub-paragraph. Additionally, certain amendments to other dependent claims have been made in an attempt to respond to the rejection stated in paragraph 18 of the subject Office Action.

Applicant respectfully submits that no new matter is added by these amendments. Accordingly, Applicant respectfully submits that these rejections should now be withdrawn.

35 U.S.C. § 103 Grounds for Rejection

The Examiner rejected Claims 1-12 under 35 U.S.C. § 103(a) as being unpatentable over *Sample* in view of *Acres*. Applicant respectfully traverses these rejections for the reasons discussed below.

The *Sample* patent shows a reconfigurable emulation system. The drawings and specification of *Sample* show that this system is a system that is generally for bench-top test use. The present invention is for development and emulation of existing hardware, and is specifically designed for use in embedded real-time systems, and requires no external hardware for it to function. Both *Sample* and the present invention use FPGAs in the design, however, the configuration controller of the present invention is able to determine the location of the configurable electronic circuit in the electronic master system and configure the configurable electronic circuit to replicate a selected function and operational characteristics of the known electronic system sub-component.

Similarly, the *Acres* patent teaches a system for monitoring and configuring gaming devices interconnected over a high-speed network. The concept taught by *Acres* is akin to updating virus definitions on a computer by accessing the virus software vendor's web site through the Internet.

Applicant's invention is directed toward solving the disadvantage that prior circuit card emulation systems required user input. Prior to the present invention the user of the *Sample* device had to enter information describing the electronic circuit or system desired to emulate at a data entry workstation that was part of the emulation apparatus. See *Sample*, col. 3, lines 21-31. On the other hand, *Acres* is not "reconfiguring" a machine or electronic circuit. The machine still does what the machine did previously or functions in essentially the same manner.

By this structure Applicant is able to achieve the advantages which have hitherto not been achievable through any adaptation of the prior art. It is therefore believed to be clear that the particular structure of Applicant is extremely important and is not a mere matter of design.

It is improper to use hindsight having read the Applicant's disclosure to "pick and choose" among isolated prior art references to disparage the claimed invention. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Even where an invention is, as a whole, fully disclosed by a combination of prior art elements, such elements cannot be combined to defeat a patent as obvious unless the art teaches or suggests the desirability of making the combination. ASC Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 221 U.S.P.Q. 929 (Fed. Cir. 1984). Thus, the mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F.2d 1260, U.S.P.Q.2d 1780 (Fed. Cir. 1992). Finally, it is the invention as a whole that is important. Focusing on the obviousness of substitutions and differences, instead of on the invention as a whole, is a legally improper way to simplify the often difficult determination of obviousness. Gillette Co. v. S. C Johnson & Son, Inc., 919 F. 2d 720, 16 U.S.P.Q. 1923 (Fed. Cir. 1990).

Independent Claim 1, *as amended*, recites the following elements, the most pertinent to this discussion being presented in bold type for the convenience of the Examiner:

1. An electronic component electronically connected with an external electronic master system comprising:

configurable electronic circuitry means for emulating an output signal from a respective known electronic system sub-component of a known electronic master system, the output signal corresponding to a function of the electronic system sub-component;

an input/output interface for electronically mating the configurable electronic circuit to the electronic master system;

a configuration controller element electronically connectable with the configurable electronic circuitry means, the configuration controller determines the location of the configurable electronic circuitry means in the electronic master system and configures the configurable electronic circuitry means to emulate a selected function and operational characteristics of the known electronic system sub-component; and

the configurable electronic circuitry means has an output adaptable as an input to the electronic master system to replicate and replace functions of the known electronic system sub-component acting in the electronic master system.

Applicant respectfully submits that the combination of *Sample* with *Acres* does not disclose, teach, or suggest "a configuration controller element electronically connectable with the configurable electronic circuitry means, the configuration controller determines the location of the configurable electronic circuitry means in the electronic master system and configures the configurable electronic circuitry means to emulate a selected function and operational characteristics of the known electronic system sub-component" as recited by amended Claim 1. As conceded by the Examiner, *Sample* and *Acres* (assumed by the Examiner' omission of reference) ***"is not expressly disclosed."*** Thus, any teaching of the configuration controller as claimed by the present invention is lacking. Accordingly, even if *Samples* could be combined with *Acres*, neither reference provides any teaching of Applicant's claimed configuration controller or invention. Therefore, independent Claim 1 and independent Claim 8 are not obvious in light of the cited art and Applicant respectfully submits that this rejection should now be withdrawn.

Further, in order to establish a prima facie case of obviousness, the prior art teachings must be sufficient to suggest making the substitution or modification necessary to make the claimed invention to one of ordinary skill in the art, In re Lalu, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1984), in the absence of applicant's own disclosure. See also, In re Laskowski, 871 F.2d 115, 117, 10 USPQ2d 1397, 1398-99 (Fed. Cir. 1989) and Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985). The motivation to make a specific structure

"is not abstract, but practical, and is always related to the properties or uses one skilled in the art would expect the [structure] to have, if made."

In re Gyurik, 596 F.2d 1012, 1018, 201 USPQ 552, 557 (CCPA 1979). See also Fromson v. Advance Offset Plate, Inc., 755 F.2d 1549, 1556, 225 USPQ 26, 31 (Fed. Cir. 1985)("Critical inquiry is whether 'there is something in the prior art as a whole to suggest the desirability, and, thus, the obviousness, of making the combination'").

There must have been a reason apparent at the time the invention was made to a person of ordinary skill in the art for applying the teachings at hand to effect the modification necessary to reach the claimed invention in the manner proposed or the use of the teaching as evidence of obviousness will entail prohibited hindsight. Graham v. John Deere of Kansas City, 383 U.S. 1, 148 USPQ 459 (1966), and In re Nomiya, 509 F.2d 566, 184 USPQ 607 (CCPA 1975).

In other words, "there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify or combine the reference teachings." M.P.E.P. § 2145.X.C.

Since there are differing natures of the problem to be solved that are being faced between the present invention and in *Sample* or *Acras*, there can thus be no motivation to use the teachings of *Sample* combined with *Acras*.

Further, there is **no suggestion** or any **objective reason** to combine the subject *Acras* reference with *Sample* to arrive at the claimed invention.

"The mere fact that references can be combined or modified **does not render** the resultant combination obvious **unless** the prior art also suggests the desirability of the combination." *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990); and, M.P.E.P. § 2143.01. [*Emphasis Added*] Here neither *Sample*, nor *Acras*, suggest the desirability of the combination.

There is no support for the conclusion in paragraph 33-34 of the subject Office Action. The M.P.E.P. § 2143.01 suggests "the importance of relying on **objective evidence** and making **specific factual findings** with respect to the motivation to combine references." Here the subject Office Action of January 14, 2005 is wholly devoid of such evidence or findings. All that is presented is the unsubstantiated conclusions of the Examiner reached after having the benefit of the disclosure from the subject application.

Further, "[a]lthough a prior art device 'may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation **in the reference** to do so.'" *In re Mills*, 916 F.2d at 682, 16 USPQ2d at 1432) [*Emphasis Added*], and M.P.E.P. § 2143.01.

Here, there is lacking the requisite suggestion in these prior art disclosures that would have motivated the artisan to do what the Examiner has characterized as being an obvious combination.

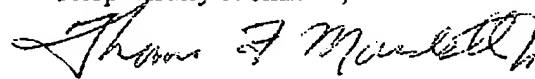
Dependent Claims 2-8 and 9-12 that depend from independent Claims 1 or 8 are also not made obvious by *Sample* in view of *Acres* because they include the limitations of either independent Claim 1 or 8 and add additional elements that further distinguish the art. Therefore, Applicant respectfully requests that Claims 2-8 and 9-12 be allowed.

Conclusion

Applicant has now made an earnest attempt to place this case in condition for allowance. In light of the amendments and remarks set forth above, Applicant respectfully requests reconsideration and allowance of Claims 1-12.

If there are matters which can be discussed by telephone to further the prosecution of this Application, Applicant invites the Examiner to call the attorney at the number listed below at the Examiner's convenience.

Respectfully submitted,



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